

STI SP001 Annual Inspection Checklist

General Inspection Information:

| | |
|---------------------------------|---|
| Inspection Date: _____ | Retain Until Date: _____ (36 months from inspection date) |
| Prior Inspection Date: _____ | Inspector Name: _____ |
| Tanks Inspected (ID #'s): _____ | |

Inspection Guidance:

- For equipment not included in this Standard, follow the manufacturer recommended inspection/testing schedules and procedures.
- The periodic AST Inspection is intended for monitoring the external AST condition and its containment structure. This visual inspection does not require a Certified Inspector. It shall be performed by an owner's inspector who is familiar with the site and can identify changes and developing problems.
- Remove promptly upon discovery standing water or liquid in the primary tank, secondary containment area, interstice, or spill container. Before discharge to the environment, inspect the liquid for regulated products or other contaminants and disposed of it properly.
- In order to comply with EPA SPCC (Spill Prevention, Control and Countermeasure) rules, a facility must regularly test liquid level sensing devices to ensure proper operation (40 CFR 112.8(c)(8)(v)).
- (*) designates an item in a non-conformance status. This indicates that action is required to address a problem.
- Non-conforming items important to tank or containment integrity require evaluation by an engineer experienced in AST design, a Certified Inspector, or a tank manufacturer who will determine the corrective action. Note the non-conformance and corresponding corrective action in the comment section.
- Retain the completed checklists for 36 months.
- Complete this checklist on an annual basis supplemental to the owner monthly-performed inspection checklists.
- **Note: If a change has occurred to the tank system or containment that may affect the SPCC plan, the condition should be evaluated against the current plan requirement by a Professional Engineer knowledgeable in SPCC development and implementation.**

| Item | Task | Status | Comments |
|---|---|--|----------|
| 1.0 Tank Containment | | | |
| 1.1 Containment structure | Check for: <ul style="list-style-type: none"> • Holes or cracks in containment wall or floor • Washout • Liner degradation • Corrosion • Leakage • Paint failure • Tank settling | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| 2.0 Tank Foundation and Supports | | | |
| 2.1 Foundation | Settlement or foundation washout? | <input type="checkbox"/> Yes* <input type="checkbox"/> No | |
| 2.2 Concrete pad or ring wall | Cracking or spalling? | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |

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|---|---|--|----------|
| 2.3 Supports | Check for corrosion, paint failure, etc. | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| 2.4 Water drainage | Water drains away from tank? | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 2.5 Tank grounding | Strap secured and in good condition? | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 3.0 Cathodic Protection | | | |
| 3.1 Galvanic cathodic protection system | Confirm system is functional, includes the wire connections for galvanic systems | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 3.2 Impressed current system | a. Inspect the operational components (power switch, meters, and alarms). | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | b. Record hour meter, ammeter and voltmeter readings. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 4.0 Tank Shell, Heads, Roof | | | |
| 4.1 Coating | Check for coating failure | <input type="checkbox"/> Yes* <input type="checkbox"/> No | |
| 4.2 Steel condition | Check for: <ul style="list-style-type: none"> • Dents • Buckling • Bulging • Corrosion • Cracking | <input type="checkbox"/> Yes* <input type="checkbox"/> No | |
| 4.3 Roof slope | Check for low points and standing water | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| 5.0 Tank Equipment | | | |
| 5.1 Vents | Verify that components are moving freely and vent passageways are not obstructed for: <ul style="list-style-type: none"> • Emergency vent covers • Pressure/vacuum vent poppets • Other moving vent components | <input type="checkbox"/> Yes* <input type="checkbox"/> No | |

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|--|---|--|----------|
| 5.2 Valves | Check the condition of all valves for leaks, corrosion and damage. | <input type="checkbox"/> Yes* <input type="checkbox"/> No | |
| 5.2.1 Anti-siphon, check and gate valves | Cycle the valve open and closed and check for proper operation. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.2.2 Pressure regulator valve | Check for proper operation. (Note that there may be small, 1/4 inch drain plugs in the bottom of the valve that are not visible by looking from above only) | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.2.3 Expansion relief valve | Check that the valve is in the proper orientation. (Note that fuel must be discharged back to the tank via a separate pipe or tubing.) | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.2.4 Solenoid valves | Cycle power to valve to check operation. (Electrical solenoids can be verified by listening to the plunger opening and closing. If no audible confirmation, the valve should be inspected for the presence and operation of the plunger.) | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.2.5 Fire and shear valves | a. Manually cycle the valve to ensure components are moving freely and that the valve handle or lever has clearance to allow valve to close completely. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | b. Valves must not be wired in open position. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |

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| | c. Make sure fusible element is in place and correctly positioned. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | d. Be sure test ports are sealed with plug after testing is complete and no temporary test fixture or component remains connected to valve. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.3 Interstitial leak detection equipment | Check condition of equipment, including: <ul style="list-style-type: none"> • The window is clean and clear in sight leak gauges. • The wire connections of electronic gauges for tightness and corrosion • Activate the test button, if applicable. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.4 Spill containment boxes on fill pipe | a. If corrosion, damage, or wear has compromised the ability of the unit to perform spill containment functions, replace the unit. | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| | b. Inspect the connections to the AST for tightness, as well as the bolts, nuts, washers for condition and replace if necessary. | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| | c. Drain valves must be operable and closed | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| 5.5 Strainer | a. Check that the strainer is clean and in good condition. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |

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| 5.5 Strainer | b. Access strainer basket and check cap and gasket seal as well as bolts. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.6 Filter | a. Check that the filter is in good condition and is within the manufacturer's expected service life. Replace, if necessary. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | b. Check for leaks and decreased fuel flow | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.7 Flame arrestors | Follow manufacturer's instructions. Check for corrosion and blockage of air passages. | <input type="checkbox"/> Yes* <input type="checkbox"/> No <input type="checkbox"/> N/A | |
| 5.8 Leak detector for submersible pump systems | Test according to manufacturer's instructions and authority having jurisdiction (AHJ). Verify leak detectors are suited and properly installed for aboveground use. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.9 Liquid level equipment | a. Has equipment been tested to ensure proper operation? | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | b. Does equipment operate as required? | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | c. Follow manufacturer's instructions | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| 5.10 Overfill equipment | a. Follow manufacturer's instructions and regulatory requirements for inspection and functionality verification. | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |
| | b. Confirm device is suited for above ground use by the manufacturer | <input type="checkbox"/> Yes <input type="checkbox"/> No* <input type="checkbox"/> N/A | |

